Standards of Public Land Health
Evaluation of 63032-GALLO RANCH Allotment
[10/01/2010]

The Roswell Field Office conducted rangeland health assessments at 6 study sites within 63032-Gallo Ranch. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
63032-CREEK-E061	X			X			N/A		
63032-HACKBERRY-E059	X			X			N/A		
63032-LAKE-E064	X			X			N/A		
63032-NORTH-E063	X			X			N/A		
63032-SOUTHWEST-E060	X			X			N/A		
63032-WEST-E062	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the Gallo Ranch allotment, 63032. Ten of these assessed soil site stability, 11 hydrologic functions and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected at the trend study plot location within the allotment were utilized to make rangeland health determination. Quantitative evaluation are performed by the Roswell Field Office interdisciplinary teams, which include some or all of the following; ground and vegetative cover and composition, production, frequency and ecological condition. The collections which were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 years. This allotment is in the "M" (Maintain) category.

This allotment contains 9,271 acres of public land. The studies are located on two Shallow Limestone CP-3 ecological sites, two Loamy CP-3 ecological sites and two Shallow CP-3 ecological sites. At each location all of the 22 indicators were rated as either 'None to Slight' or

‘Slight to Moderate’ degree of departure from the Ecological Site description and/or Ecological Reference Area(s). The majority of the indicators at all six study locations fell in the ‘None to Slight’ category. The indicator for Invasive Species was consistently rated as “Slight to Moderate” due to the presence of cholla, bear grass or yucca. The team did note that the level of cholla, bear grass or yucca was still on the “Slight” side of this indicator in each of the pastures. There are no riparian areas on the public land in this allotment.

Recommendations: With the all of the indicators fall in the ‘None to Slight’ or ‘Slight to Moderate’ category, this allotment is rated as “Meeting” the standard for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grasscover and good plant composition remains.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-CREEK-E061			
Legal Land Desc	SENW 27 0030S 0170E Meridian 23	Acreage	800
Ecosite	070CY113NM SHALLOW CP-3	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	ARNOLD & ORTEGA	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	009	Soil Taxon Name	DARVEY
Texture Class	NM632 L	Soil Phase	DARVEY-PASTURA
Texture Modifier	NM632 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	short & stable					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:	approximately 10%					
S H	Gullies					X
Comments:						

S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	bear grass, cholla & yucca					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:	good habitat to deer and pronghorn					
B	Wildlife Populations					X
Comments:						

B	Special Status Species Habitat					
Comments:	not applicable					
B	Special Status Species Populations					
Comments:	not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	1	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: alot of seedheads on the vegetation, pasture looks really good

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-HACKBERRY-E059			
Legal Land Desc	NENW 31 0030S 0170E Meridian 23	Acreage	1320
Ecosite	070CY102NM SHALLOW LIMESTONE	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	ARNOLD & ORTEGA	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	011	Soil Taxon Name	DEAMA
Texture Class	NM632 CBV-L	Soil Phase	DEAMA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	short & stable					
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	bear grass, yucca & cholla					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X

Comments:						
B	Special Status Species Habitat					
Comments:	not applicable					
B	Special Status Species Populations					
Comments:	not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	2	8
H	Hydrologic	0	0	0	2	9
B	Biotic	0	0	0	1	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: light livestock use, good seed on grasses

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-LAKE-E064			
Legal Land Desc	SWSW 5 0040S 0170E Meridian 23	Acreage	2410
Ecosite	070CY109NM LOAMY CP-3	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	ARNOLD & ORTEGA	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	013	Soil Taxon Name	DEAMA
Texture Class	NM632 L	Soil Phase	DEAMA-PASTURA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						

S H	Water Flow Patterns				X	
Comments:	short & stable					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	cholla encroachment					
B	Reproductive Capability of Perennial Plants					X

Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:	good pronghorn habitat					
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	not applicable					
B	Special Status Species Populations					
Comments:	not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	1	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: net wire fences may be the cause of no pronghorn, Pasture look great with alot of

winterfat. The road no longer exists to this location, must access by driving along the fenceline.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-NORTH-E063			
Legal Land Desc	NWNW 15 0030S 0170E Meridian 23	Acreage	3360
Ecosite	070CY109NM LOAMY CP-3	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	ORTEGA & ARNOLD	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	009	Soil Taxon Name	DARVEY
Texture Class	NM632 L	Soil Phase	DARVEY-PASTURA
Texture Modifier	NM632 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence				X	
Comments:	some dead yucca noted					
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological					X

	Crusts					
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	not applicable					
B	Special Status Species Populations					
Comments:	not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	4	7
B	Biotic	0	0	0	4	7

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Good stands of sideoats & blue grama, alot of seedheads present. Pasture looks great.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-SOUTHWEST-E060			
Legal Land Desc	SESW 1 0040S 0160E Meridian 23	Acreage	560
Ecosite	070CY102NM SHALLOW LIMESTONE	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	ORTEGA & ARNOLD	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	011	Soil Taxon Name	DEAMA
Texture Class	NM632 CBV-L	Soil Phase	DEAMA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X

Comments:						
S H	Water Flow Patterns				X	
Comments:	Short & stable					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	yucca, bear grass & cholla					
B	Reproductive Capability of					X

	Perennial Plants					
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	1	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Net wire fences influencing pronghorn use. Pasture looks good with alot of seed head on forage.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63032-WEST-E062			
Legal Land Desc	SWSW 16 0030S 0170E Meridian 23	Acreage	821
Ecosite	070CY113NM SHALLOW CP-3	Photo Taken	N
Watershed	13060006020 GALLO		
Observers	ARNOLD & ORTEGA	Observation Date	10/01/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	013	Soil Taxon Name	DEAMA
Texture Class	NM632 L	Soil Phase	DEAMA-PASTURA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X

Comments:						
S H	Water Flow Patterns				X	
Comments:	short & stable					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	Bear grass & cholla encroaching					
B	Reproductive Capability of					X

	Perennial Plants					
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	2	9

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Pasture looks good. Trend plot has vanished.

Determination of Public Land (Rangeland) Health for 63032-GALLO RANCH

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) biotic communities, including Native, Threatened, Endangered and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluated the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within the Gallo Ranch allotment, 63032, meets the (1) Upland Sites Standard and (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species Standard. There are no riparian areas on this allotment therefore this standard was not addressed.

/s/ J. Howard Parman	10/06/2010
Assistant Field Manager	Date